

## 802.11 WIRELESS NETWORK

---

**Effective Date:** July 01, 2008  
**Revision Date:** August 6, 2008  
**Version:** 001  
**Product Manager:** Brett Shaw  
**Phone:** 801-537-9090  
**E-mail:** [bshaw@utah.gov](mailto:bshaw@utah.gov)

The Department of Technology Services provides wireless access to the State Wide Area Network (WAN) to authorized state and local government employees.

Wireless coverage in state facilities is determined by the agency.

Agencies may install 802.11 Wireless Network access points at their locations configured as part of the interoperable 802.11 Wireless Network. DTS provides installation and configuration instructions.

### 802.11 Wireless Network Product Features

Feature	Description
802.11 Standards	802.1x IEEE standards compliant: 802.11b; 802.11a; 802.11g. WiFi Protected Access (WPA) compatible. Extensible Authentication Pool (EAP) compatible. Access point options are documented in the DTS <i>802.11 Wireless LAN Architecture and Standards</i> document published on the product web page: <a href="http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm">http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm</a>
Customer Configuration	An estimate of the equipment and installation cost will be presented for customer approval prior to implementation. See site survey on the product web page: <a href="http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm">http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm</a>
RADIUS	Cisco Secure ACS (Access Control Server).
User Authorization	'Challenged Access' limits access to users listed in an authentication directory. DTS operates and maintains the VPN Concentrators.
Authentication Directory	The Utah Master Directory (UMD) is LDAP compliant.
Network Connection	Provides segmented Wireless LAN security using VLANs (Virtual LANs). State employees have the same access as with their local wired network. Microsoft SMB file sharing is restricted.
Client Software Standard – Option for Customer	Port-based access control client software for adding EAPOL (EAP over LAN) data to the MAC header of the Ethernet frame. Provides encryption of user credentials and data.

Purchase	Client Software standard is listed in the <a href="#">System Requirements section</a> below and on the product web page.
----------	--

### Features Not Included

Feature	Explanation
Wireless Adapter	Customer agencies are responsible for purchasing a standards-approved wireless adapter for each of their agency users. See the list of tested adapters in the <a href="#">System Requirements</a> section below.
Client Software	Customer agencies are responsible for purchasing the Funk Software Odyssey Client Software for each of their agency users. The Odyssey Client Software can be ordered from DTS using the on-line order form on the product web page: <a href="http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm">http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm</a> Installation and configuration instructions are provided by DTS.
Required WAN Connection	If the location at which the Wireless Network access point is requested does not have a WAN connection that supports VLAN services, additional hardware costs may apply and will be provided in the estimate. If additional WAN connection hardware is required DTS will own and manage the hardware after installation.
Non-State Employee Access	802.11 Wireless Network access is for state and local government employees. Access is not provided for general citizenry.
Support of Non-ITS Standard Wireless LANs	DTS will not provide support for any 802.11 Wireless LAN system installed by a customer not complying with DTS product standards.

### Wireless LAN Installation Rates

Feature	Description	Base Rate
Site Survey and Estimate	One-time charge, if applicable: Standard DTS labor rates if Wireless or Wiring Technician(s) are required. No charge for WAN Planner labor.	DTS Labor Rates
Installation	One-time charge: Access Point(s), antenna(s) and equipment at cost plus the standard administrative fee. Installation at standard DTS labor rates. No charge for WAN Planner labor.	Per Site Survey Estimate
Client Software	To order the Odyssey Client through DTS, please complete and submit the Odyssey Client order form on the DTS 802.11 Wireless Network web page:	Rate Based on Quantity/Includes One Year Maintenance
Client Software Annual	Annual Maintenance/Support for	Rate Based on Quantity

Maintenance	subsequent Years	
-------------	------------------	--

### Optional Support Rates

Feature	Description	Base Rate
Support for Customer-installed Systems (must comply with DTS standards)	Standard DTS labor rates if Wireless or Wiring Technician(s) are required to troubleshoot or repair system.	DTS Labor Rates.

### Ordering and Provisioning

The order form for the product information described below may be found on the following DTS web site:  
<http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm>

Access to the State 802.11 Wireless Network  
802.11 Wireless Network Installation  
Client Software  
Registering an Agency-Installed Access Location

### DTS Responsibilities

DTS Customer Relationship Managers are responsible for verifying with the customer agency's IT Director that an 802.11 Wireless Network access point request has been approved by the agency.

DTS, in its responsibility for maintaining the integrity and security of the State WAN, is responsible for shutting down any 802.11 Wireless Network access point infiltrated by unauthorized users.

### Agency Responsibilities

The customer is responsible for adhering to their agency's policies and procedures by submitting orders that have been properly approved.

The customer's agency LAN administrator is responsible for configuring their agency's 802.11 Wireless Network users' laptops or PDA devices with appropriate Client Software and Wireless Adapters.

To manage 802.11 Wireless Network access points as part of the secure, interoperable system, the customer must permit access to applicable network routers and switches.

802.11 Wireless Network users are responsible for complying with the State Acceptable Use Policy and the State Information Security Policy.

## System Requirements

<b>Laptop Platforms</b>	Windows XP, 2000, 98, ME.
<b>PDA Platforms</b>	Windows CE Pocket PC – Windows XP, 2000, 98, ME Windows Mobile 2003 for Pocket PC
<b>Wireless Adapter</b>	3COM 802.11 A/B/G with Xjack antenna. Cisco Aironet 350 802.11a/b/g. SMC Elite Connect 802.11b Enterasys RoamAbout 802.11b. Intel Centrino built-in capability. Any PEAP capable 802.1x compliant device should operate. However, manufacturers sometimes implement proprietary features that may cause problems. Customers may request DTS test other wireless adapters.
<b>Client Software</b>	Funk Software Odyssey version 2.2 or better. The Odyssey Client software can be ordered from DTS. Client Software price list and order form are on the product web page.

## GENERAL SERVICE LEVELS AND METRICS

All technical incidents and service requests, and certain types of orders, related to products and services provided by DTS will be reported to the DTS Enterprise Service Desk or to specialized Help Desks that support State agencies or DTS divisions and regions. All incidents and requests will be captured in the DTS Remedy Help Desk application. DTS staff will provide timely acknowledgement and resolution of technical incidents and service requests.

DTS support staff, including staff directly assigned to the DTS Enterprise Service Desk, will exert all reasonable efforts to meet the Time to Initial Response (TIR) and Total Time to Resolution (TTR) targets set forth below.

The DTS Enterprise Service Desk is accessible 24x7 by telephone at 538-3440 or 800-678-3440. Live chat and direct user reporting of incidents are also available on the DTS website at [dts.utah.gov](https://dts.utah.gov). Published "Business Hours" for the DTS Enterprise Service Desk are 7:00 AM-6:00 PM, Monday-Thursday. Hours of support/on-call coverage vary by agency/division/region and product.

### Incident Response and Resolution Targets

<b>Time to Initial Response Targets</b>	<b>% Tickets</b>	<b>Total Time to Resolution Targets</b>	<b>% Tickets</b>
Low Priority – 1 Business hour	75%	Low priority – 6 Business hours	75%
Medium priority – 1 Business hour	75%	Medium priority – 3 Business hours	75%
High priority – Attempt Warm Transfer	90%	High priority – 4 Clock hours	75%
Urgent priority – Immediate Warm Transfer	95%	Urgent priority – 3 Clock hours	100%

### Customer Satisfaction Surveys and Reporting

All users/customers whose technical incidents are resolved by DTS staff will be given the opportunity to respond to an on-line survey regarding their level of satisfaction with the support received from DTS.

Responding to the survey groups and the level of satisfaction of users by agencies.

**Customer Satisfaction Targets**

Metric Description	Target
Average level of satisfaction with resolution efforts	> 4.2 on a scale of 0 - 5
Percentage of respondents satisfied or better with service received	93% of respondents satisfied